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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,967	08/26/2003	Lawrence G. Rodriguez	5801-03/B &D0003.US	2849

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EXAMINER	
BOSWELL, CHRISTOPHER J	

ART UNIT	PAPER NUMBER
3673	

MAIL DATE	DELIVERY MODE
11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/647,967	RODRIGUEZ ET AL.	
	Examiner	Art Unit	
	Christopher Boswell	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *8/29/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,335,950 to Mirshafiee et al., in view of U.S. Patent Number 4,108,482 to Dietrich et al.

Mirshafiee et al. disclose the invention substantially as claimed. Mirshafiee et al. disclose a lockset having a lock mechanism (112) including an actuator (134) having an aperture (136), an operator (24), and a turn button (140) mounted in the operator, the turn button having a head portion (140), and a shaft (142), and means for self-alignment (the end of the shaft is rounded to assist in alignment with the aperture) of the shaft with the aperture of the lock mechanism as the shaft is inserted into the aperture, as in claims 1 and 4. However, Mirshafiee et al. do not disclose the shaft having a leading helical end. Dietrich et al. teaches shaft (37), for a locking assembly, which engages an aperture (42) of a lock mechanism (20), wherein the shaft has a helical leading end (75; wherein a conical shape is of a helical form), wherein the leading helical portion having a plurality of leading helical surfaces (each surface transitions from the flat surface of the shaft to the conical end) that taper and twist from a transition line of the shaft toward an end of the shaft (figure 5, as the surfaces taper to the point of the cone and twist from

the flat surface to the rounded conical surface), as in claims 2, 5, and 9, as well as the plurality of helical surfaces smoothly transition between adjacent helical surfaces (figure 5; as there are no sharp edges to prevent a smooth transition), as in claims 3, 6, and 10, wherein once the leading helical end portion engages the aperture, a rotation of the turn-button effects a corresponding rotation of the rotatable actuator of the lock mechanism (column 3, lines 44-66 discloses how the latch is manipulated), as in claim 8, and a number of the plurality of leading helical surfaces is greater than two (the examiner considers the helical surfaces to be 4, one helical surface on each side of the turn-button, and one helical surface connecting the aforementioned helical surfaces at the top and bottom of the aforementioned helical surfaces), as in claims 14, 16 and 19-20, in the same field of endeavor for the purpose of ease in the insertion of the shaft into an aperture. It would have been obvious to one with ordinary skill in the art at the time the invention was made to utilize a conical leading end, as taught by Dietrich et al., on to the shaft of Mirshafiee et al. in order to ease in the insertion of the shaft into an aperture.

Mirshafiee et al. further disclose the operator is a door knob (24), the shaft of the turn-button extends from the head portion through the door knob to engage the aperture of the lock mechanism (figure 4), as in claims 11 and 17, and where a rotation of the turn-button effects a corresponding rotation of the aperture of the lock mechanism (column 3, lines 43-61), as in claims 12 and 13, as well as the aperture of the lock mechanism has a substantially rectangular shape (column 3, line45-48 1), as in claims 13, 15 and 18.

Response to Arguments

Applicant's arguments filed August 29, 2007 have been fully considered but they are not persuasive. In regards to the argument that Dietrich et al. does not disclose a leading helical end, the examiner respectfully disagrees. The Examiner respectfully submits that a conical end can be analogous to a helical end. Merriam-Webster's Online Dictionary defines a helix as "a curve traced on a cylinder or cone by the rotation of a point crossing its right sections at a constant oblique angle." Thus a helical end surface can be a conical surface, as both end surfaces follow a path rotated about a central surface.

Regarding the argument that Dietrich does not disclose a plurality of leading helical surfaces that taper and twist from a transition line of the shaft to the tip end of the shaft, the examiner respectfully disagrees. Dietrich et al. disclose four continuous surfaces at mid point of the shaft that taper and twist to form the conical end portion.

In regards to the argument that Dietrich et al. does not disclose the plurality of leading helical surfaces smoothly transition between adjacent helical surfaces, the examiner respectfully disagrees. As shown in figure 5 of Dietrich et al., it is clear that there are no sharp edges or abrupt stops to prevent a smooth transition.

Regarding the argument that Dietrich et al. does not disclose any surface that once engaged with the aperture, a rotation of the turn-button would effect a corresponding rotation of the rotatable actuator, rather rotation is only effected when the shank of the spindle engages the aperture, the examiner partially agrees. The claim is absent that the helical end portion is the mechanism that rotates the rotatable actuator. Dietrich does disclose that rotation of the shat causes a corresponding rotation of the rotatable actuator of the lock mechanism.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Boswell
Examiner
Art Unit 3673

CJB CB
November 9, 2007

PATRICIA ENGLE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600
11-13-07